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NATIONAL COMMUNICATIONS FROM PARTIES NOT INCLUDED IN ANNEX I TO THE CONVENTION

PROVISION OF FINANCIAL AND TECHNICAL SUPPORT

Report on the workshop on emission factors and activity data for the improvement of GHG inventories, 4-6 August 1999, Accra, Ghana

Note by the secretariat

1. The Conference of the Parties (COP), by its decision 10/CP.2, requested the secretariat "to provide a forum for the exchange of experiences in the development of emission factors and activity data for the estimation of the inventory" (FCCC/CP/1996/15/Add.1, annex, para. 13).

2. In response to this request, the secretariat organized the first Workshop on Emission Factors and Activity Data, held from 16 to 18 September 1998 in Havana, Cuba. Based on the success of that workshop, the secretariat organized a second one on "Emission Factors and Activity Data for the Improvement of GHG Inventories", which was held from 6 to 8 August 1999 in Accra, Ghana. Fifty participants from 26 countries, most of them nominated by their governments, attended this workshop. These included representatives from national teams and international agencies who are experts in greenhouse gas (GHG) inventories, especially in the energy and land-use change and forestry sectors.

3. A technical paper entitled "Comparative analysis of emission factors and activity data used in the estimation of GHG emissions in the land-use change and forestry and energy sectors by some developing countries", which was prepared by two consultants commissioned by the secretariat and which served as a background paper for the workshop, is also available for consideration by the SBI at its eleventh session (FCCC/TP/1999/3).

4. The attached report, submitted by Dr. N.H. Ravindranath and Dr.Youba Sokona, Co-Chairs of the Working Group on the Land-Use Change and Forestry Sector, and Dr. Emilio Lèbre La Rovere and Dr. Samir Amous, Co-Chairs of the Working Group on the Energy Sector, provides information on the objectives, activities and the outcome of the Accra Workshop.

5. The SBI may wish to take note of the report on the Workshop on Emission Factors and Activity Data for the Improvement of GHG Inventories, and invite the Parties concerned to further develop the project concepts contained therein for the consideration by the GEF, in accordance with decision 10/CP.2.

WORKSHOP ON EMISSION FACTORS AND ACTIVITY DATA FOR THE IMPROVEMENT OF GHG INVENTORIES, 4-6 AUGUST 1999, ACCRA, GHANA

Report by the Co-Chairs

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I. INTRODUCTION

A. Mandate

1. Pursuant to decision 10/CP.2, the United Nations Framework Convention on Climate Change (UNFCCC) secretariat convened the second Workshop on Emission Factors and Activity Data for the Improvement of GHG Inventories from 6 to 8 August 1999 in Accra, Ghana "to provide a forum for the exchange of experiences in the development of emission factors and activity data for the estimation of the inventory".

2. Fifty participants from 26 countries attended this workshop. These included representatives from national teams and international agencies who are experts in greenhouse gas (GHG) inventories, especially in the energy and land-use change and forestry sectors.

B. Scope of the report

3. This report briefly describes the objectives, activities and the outcome of the Accra Workshop. Ten top priority project concept notes proposed by the workshop participants are attached as annex 1 (for the land-use change and forestry sector) and annex 2 (for the energy sector). The titles of the project concept notes which are not attached are listed in annex 3.

II. OBJECTIVES OF THE WORKSHOP

4. The objectives of the workshop were:

(a) To build on the results of the Havana Workshop and continue a process that will identify strategies to improve the quality of emission factors and activity data for GHG inventories, which are an integral component of both national communications and longer term national planning;

(b) To address problems and gaps relating to emission factors and activity data identified by non-Annex I Parties from different regions during the preparation of their GHG inventories, with a view to improving the accuracy, consistency and comparability of their GHG inventories;

(c) To prioritize the immediate and longer term needs, including capacity-building, at national, regional and global levels, for the improvement of emission factors and activity data for GHG inventories; and

(d) To propose and prioritize a list of project concept notes on the improvement of emission factors and activity data in the energy and land-use change and forestry sectors at the national and regional and global levels.

5. It is expected that the outputs of projects arising from these concept notes will greatly improve the quality of the national GHG inventories and will also feed into the IPCC assessment process.

III. WORKSHOP ACTIVITIES

6. At the opening session of the workshop, Dr. P.C. Acquah, Executive Director of the Environmental Protection Agency of Ghana warmly welcomed the participants to the workshop. Dr. S. Duah-Yentumi then gave an opening address on behalf of the UNDP Resident Representative in Accra, Ghana. Claire N. Parker, Coordinator of the Implementation Programme of the UNFCCC secretariat, who also chaired all the plenary sessions, gave a brief overview of the objectives of the workshop and the procedures for conducting it.

7. The first day of the workshop was devoted to a number of presentations, which included:

(a) Guidelines for the preparation of initial national communications of non-Annex I Parties (by the UNFCCC secretariat);

(b) Status of implementation of the National Communications Support Programme (by UNDP/GEF);

(c) Good practice in GHG inventory preparation (by the IPCC/OECD Programme);

(d) Methodological issues in GHG inventories of Parties (by the UNFCCC secretariat);

(e) Comparative analysis of activity data and emission factors for the land-use change and forestry sector of GHG inventories in some developing countries (by the UNFCCC consultant);

(f) Comparative analysis of activity data and emission factors for the energy sector of GHG inventories in some developing countries (by the UNFCCC consultant);

(g) Country studies: three for the land-use change and forestry sector (the Philippines, Mexico and India) and three for the energy sector (Brazil, South Africa and India). These studies illustrated experience of these countries in the application and development of emission factors and activity data in GHG inventories.

8. During the second day, the participants were divided into two Working Groups, one for the land-use change and forestry sector; and the other for the energy sector. These two Working Groups were then further sub-divided into four regional groups: African, Asian, Latin American and the Caribbean and Eastern European. Each regional group was requested to undertake the following tasks based on the results of the Havana Workshop:

(a) To identify and prioritize the key issues related to emission factors and activity data in each region and propose immediate and longer term measures to address them;

(b) To identify the existing, planned, and proposed projects and programmes to address the key issues related to emission factors and activity data in each region so as to avoid any duplication of effort;

(c) To develop project concept notes on the improvement of emission factors and activity data in the two sectors in each region based on the framework provided by the secretariat.

9. The regional groups of the two working groups held discussions among themselves, and completed their deliberations during the second half of the third day. A plenary session was then convened and the co-chairs of the two working groups reported on the results of their deliberations.

A. Land-use change and forestry sector working group and list of project concept notes

10. The Working Group of the Land-Use Change and Forestry Sector reassessed and confirmed the key issues related to emission factors and activity data in the sector as identified at the Havana Workshop, which, with regional variations, included:

(a) Lack of or non-availability of data;

(b) Inaccessibility to existing data (from forest inventory and satellite imagery); and

(c) Inadequacy of institutional infrastructure and technical capacity (e.g. some countries of South-East Asia and West Africa) to access, assess and use the existing data in the short term, and to generate primary data in the longer term.

11. The two critical activities relevant to the generation of activity data for emissions inventories relate to:

(a) Lack of periodic data on land cover and land-use change (according to vegetation types in a country); and

(b) Lack of forest inventory studies to generate several parameters required to make emissions inventories (e.g. above-ground biomass, growth rate, and soil carbon density).

12. Based on these issues, the Working Group proposed five project concepts (four regional and one global). Of these, one is focusing on assessment, development and dissemination of good practice in GHG inventory preparation in the land-use change and forestry sector. This is certainly an important activity. Indeed, IPCC is planning to undertake the assessment and

development of good practice guidance for the land-use change and forestry sector, though funding for dissemination of good practice guidance has to be secured from other sources later (see paragraph 18). Another project concept is focusing on global assessment of emission factors, which seems to be also overlapping with the IPCC planned activities (see paragraph 19). One project concept on "land-use and land cover change detection and monitoring using remote sensing for the African region" needs further assessment before any concrete activities can be proposed. Hence these three project concepts are not ranked as high priority.

13. The following two regional project concepts are ranked as high priority. Only the titles, the indicative costs and the estimated duration of the project concept notes are given, while the rationale, objectives, brief description and expected outputs/outcomes of the project concepts can be found in annex I.

- *Regional project: Development of default values for emission factors and activity data in the land-use change and forestry sector for selected ecological zones.*

- *Regional project: Forest carbon inventory programme for the collection of activity data, building on existing programmes.*

B. Energy sector working group and list of project concept notes

14. The Working Group had also reassessed and largely confirmed many key issues related to emission factors and activity data at the sector as identified at the Havana Workshop. These included:

(a) Improvement and extension of national energy balances to include detailed energy end-uses and efficiencies by technology, equipment vintage and operating conditions, particularly in the residential, transport and industry sectors;

(b) Surveys of energy consumption in the residential sector, and studies of emission factors for biomass fuels used in rural areas;

(c) Studies of the road transport sector: operating conditions of vehicle fleets and emission factors for non-CO_2 gases;

(d) Determination of fugitive emission factors for different coal types and processing activities;

(e) Calculation of fugitive emissions of methane and CO_2 from oil and gas systems;

(f) Development of emission factors for the biomass transformation processes.

15. In addition, the Working Group identified some important issues related to emission factors and activity data that are common for all sectors and for all regions, and not only for the energy sector of a particular region. Thus, the Working Group decided to establish a group to take up these cross-cutting global issues.

16. Based on these issues, the Working Group proposed 15 project concepts: four from the African group, two of which are ranked as high priority; five from the Asian group, three of which are ranked as high priority; one from the Latin American and the Caribbean group; two from the Eastern European (Transcaucasian) group; and three from the global group, one of which is ranked as high priority.

17. Only the project concept notes ranked as high priority are listed below. They reflect the different concerns and gaps in emission factors and activity data in these regions. For example, the African group is more concerned with emissions due to the use of bio-fuel, while the Asian group is more concerned with non-residential biomass combustion. One of the Transcaucasian project concepts is focusing on the transport sector in the region, while the other, though important, is focusing on the improvement of data management systems rather than that of emission factors and activity data for the region, and hence it is excluded from the list. Further details of the listed project notes, which have been edited, can be found in annex II.

Africa

- *Improvement of activity data and emission factors due to bio-fuel use and transformation in Africa.*

- *Improvement of activity data and emission factors in a number of energy consuming sectors (transport, fugitive emissions and industries) in Africa.*

Asia

- *Development of activity data and emission factors for non-residential biomass combustion.*

- *Development of activity data and emission factors for solid fuels using selected small scale/informal sector industries.*

- *Development of activity data and emission factors for small auto producers (portable generator sets, small diesel engines for power).*

Latin America and the Caribbean

- *Methodology for improvement and extension of national energy balances in Latin America and the Caribbean region.*

Eastern Europe (Transcaucasian countries)

- *Development of activity data and emission factors for road transport sector in Transcaucasia.*

Global

- *Application of good practice guidelines in GHG inventory preparation in non-Annex I Parties.*

18. It may be noted that in response to the request by the Subsidiary Body for Scientific and Technological Advice (SBSTA), IPCC is currently developing "good practice" guidance in GHG inventory management, which is relevant for improving the quality of emission factors data and selected activity data. The focus on these good practice guidelines is on energy, industrial processes, agriculture and waste, while good practice guidance on land-use change and forestry would be developed later. A final report of this good practice guidance is expected to be completed by IPCC in May 2000 and submitted to the SBSTA at its twelfth session. Once this guidance is developed, it will be used and applied to improve national GHG inventories in relevant sectors. Thus, the global project concept listed above should not be seen as an overlap of IPCC activities, as IPCC has no funds allocated for training and dissemination of such good practice guidance. Rather, it will bring the results of the IPCC activities on good practice guidance to experts of non-Annex I Parties involved in the preparation of GHG inventories. Funding for the training activities has to be secured through some appropriate means.

19. In addition, IPCC is planning to undertake a programme on the global assessment of existing emission factors with a view to developing a global database. One of the global project concept notes proposed also focuses on this issue. In order to avoid duplication of effort, it is not listed as high priority in this report. Support for this global effort may be channelled through IPCC because the global database will facilitate sharing of information on emission factors and contribute to the preparation of good quality inventories.

IV. FOLLOW-UP ACTIVITIES

20. The workshop participants were of the view that guidance is needed from the Subsidiary Body for Implementation (SBI) on how to proceed with the above-listed proposed project notes so that they can be further developed into full proposals for GEF funding or, where appropriate, for bilateral/multilateral funding.

21. In the margins of COP 5, a special event will be organized by the UNFCCC secretariat to provide a forum for further exchange of experience in the application and development of GHG emission factors and improvement of activity data. The results of the Accra Workshop will be presented by the co-chairs of the two working groups at this special event.

22. The UNFCCC secretariat is encouraged to solicit funds to organize further workshops, preferably at the regional level, so that more regional participants can be invited to share their experience in the application and development of emission factors and activity data for improving GHG inventories.

V. CONCLUSIONS

23. Two working groups, one on the land-use change and forestry sector, the other on the energy sector, have reassessed and largely confirmed the key issues related to emission factors and activity data in these two sectors, as identified in the Havana Workshop. Based on this reassessment and confirmation, 20 project concept notes have been proposed, with a view to improving the quality of national and regional emission factors and activity data for GHG inventories for these two sectors.

24. Two of the five project concepts proposed by the land-use change and forestry sector working group, and eight of the 15 project concepts proposed by the energy sector working group, are ranked as high priority, as presented in the annexes.

25. It should be noted that these project concept notes are not very comprehensive and do not cover all possible areas in these two sectors for which appropriate emission factors and activity data could be developed, as they were prepared within certain constraints (e.g. time and the limited number of participants, especially within the Latin American and the Caribbean and Eastern European groups). Despite this limitation, it is expected that these project notes will be further developed into full project proposals by interested countries, the outcome of which will greatly improve the quality of the emission factors and activity data in various regions, and hence, the accuracy, reliability and comprehensiveness of the GHG inventories. The results of the studies will also feed into the IPCC work for improving GHG inventories.

VI. RECOMMENDATIONS

26. Non-Annex I Parties have been *"encouraged to formulate cost-effective national, and where appropriate, regional programmes aiming at the improvement of the quality of local emission factors and appropriate data gathering, and to submit requests for financial and technical assistance to the interim operating entity of the financial mechanism of the Convention in addition to their request for support for the preparation of their initial communications" (see decision 10/CP.2, annex, para. 13).*

27. The improvement of local emission factors and activity data will enhance the quality of the national GHG inventories, which constitute a major component of the national communications of non-Annex I Parties.

28. The workshop recommended that the high priority concepts be further pursued by interested countries and developed into full project proposals for funding under paragraph 13 of the annex to decision 10/ CP.2. In addition, some of the project concepts listed in annex 3,

though not listed as top priority for the immediate term, are important for the longer term. Hence, they should also be developed whenever appropriate. Non-Annex I Parties may wish to submit further project proposals for funding.

Annex I

Two high priority project concept notes proposed by the Working Group on the Land-Use Change and Forestry Sector

1. Project title:
Regional project: Development of default values for emission factors and activity data in the land-use change and forestry sector for selected ecological zones.

2. Project rationale:

- Need to improve emission factors and activity data for national GHG emission inventories, as the default values given in the IPCC Guidelines are often at global, biome or continental level, leading to large uncertainties when used at regional or national level for different vegetation types;
- Land categories used in the IPCC guidelines for which default values are given, are not compatible with the land categories used in the regions or countries;
- The values of many of the activity data vary with vegetation types (such as above-ground biomass) and socio-economic situations (such as fuelwood use);
- The study will be cost-effective because the tropical regions on the different continents have similar ecological zones and forest or land-use types.

3. Objective:
To generate regional default values for emission factors and activity data that will be evaluated and disseminated at regional workshops.

4. Brief description:

- Within each selected ecological zone, relevant institutions, key experts, stakeholders, ongoing projects and initiatives will be identified to promote collaboration and avoid duplication of work;
- Develop regional default values for activity data and emission factors. Activity data that require regional default values include: above ground biomass before conversion and after conversion; annual growth rate of above-ground biomass in forests and abandoned land for different periods; annual uptake of carbon in soil; fraction of biomass left for decay;
- Develop a framework for reviewing data and assessing uncertainty.

5. Expected outputs/outcomes:

- Database of existing default values for activity data and emission factors, regional institutions and experts;
- Establishment of a mechanism for cost-effective regional data management;
- Tables with improved regional default values for emission factors and activity data, including a range of uncertainties, which will lead to improved GHG inventories.

1. Project title:

Regional project: Forest carbon inventory programme for the collection of activity data, building on existing programmes.

2. Project rationale:

- Long-term monitoring is needed to establish reliable activity data for forests;
- The existing forest inventory studies do not cover all the activity data required for the work under the United Nations Framework Convention on Climate Change and hence, may have to be modified;
- There is a need to improve the current forest inventory programmes and generate the data required under the UNFCCC.

3. Objectives:

- Assess the existing forest inventory activities/projects in the region with respect to their coverage of the required activity data;
- Identify the data gaps in the current inventory;
- Develop methods for conducting forest inventories incorporating all the activity data required for the GHG emission inventories;
- Train national experts in the use of forest carbon inventory methods;
- Establish regional networks to promote exchange of information.

4. Brief description:

- The project will be implemented in groups of countries in the regions based on the Food and Agriculture Organization (FAO) ecological zones classification with the option for further distinction of ecozones on the basis of local systems;
- Selection of representative forest areas for long-term monitoring purposes;
- Development of forest carbon/biomass inventory methods including all relevant activity data parameters;
- Establish long-term carbon/biomass monitoring plots, taking into consideration conventional and existing forest inventory plots;
- Capacity-building in using modified inventory methods.

5. Expected outputs/outcomes:

- Methods and practices for generating reliable activity data for estimating GHG emissions;
- Develop forest carbon/biomass inventory methods;
- Initiate regional collaboration for sharing forest carbon/biomass inventory methods;
- Capacity-building to disseminate knowledge on established inventory methods;
- Develop institutional capacity for the long-term monitoring of forest carbon/biomass stocks.

Annex II

Eight project concept notes proposed by the Working Group on the Energy Sector

1. Project title:
Improvement of activity data and emission factors due to biofuel use and transformation in Africa

2. Project rationale:
- The use of default activity data and emission factors leads to significant uncertainties in GHG inventories in Africa, and hence their improvement will enhance the quality of GHG inventories as an important part of national communications;
- For meaningful implementation of the clean development mechanism, precise estimation of the GHG emission inventories will be required.

3. Objectives:
- Obtain more realistic activity data and emission factors related to: (a) woodfuel use; (b) carbonization process; (c) other residential energy uses (e.g. kerosene for lighting, etc.);
- Set up a database of activity data and emission factors that could be adopted as default values for African countries;
- Better fulfilment of commitments under Article 12.1 of the Convention;
- Building capacity of African scientists and decision makers.

4. Brief description:
The project will include different surveying and research activities in residential energy use and carbonization in a number of representative African countries so that activity data and emission factors can be generated.

5. Expected outputs/outcomes:
- Improved activity data and emission factors that could eventually be used as default values;
- Improved scientific and technological and decision-making capacities in Africa, and enhance the African capacity in the UNFCCC process;
- Provide additional information for relevant planning and sustainable woodfuel management.

1. Project title:
Improvement of activity data and emission factors in a number of energy consuming sectors (transport, fugitive emissions and industries) in Africa

2. Project rationale:

- The use of default activity data and emission factors leads to significant uncertainties in GHG inventories in Africa, and hence their improvement will enhance the quality of GHG inventories as an important part of national communications;
- For meaningful implementation of the clean development mechanism, precise estimation of GHG emission inventories will be needed.

3. Objectives:

- Obtain more realistic activity data and emission factors related to transport, fugitive emissions and industries;
- Set up a database of activity data and emission factors that could be adopted as default values for African countries;
- Better fulfilment of commitments under Article 12.1 of the Convention;
- Building capacity of African scientists and decision makers

4. Brief description:
The project will undertake various surveying and research activities in a number of representative African countries focusing on the following:

- Improvement of activity data related to transport, fugitive emissions and industrial energy uses;
- Improvement of emission factors related to transport energy uses, electricity generation and fugitive emissions.

5. Expected outputs/outcomes:

- Activity data and emission factors that could eventually be used as default values;
- Enhanced scientific, technological and decision-making capacities in Africa for the UNFCCC process;
- Provide information for relevant planning and sustainable energy management.

1. Project title: *Development of activity data and emission factors for non-residential biomass combustion in Asia*
2. Project rationale: Non-residential biomass in Asia contribute significantly to non-CO_2 GHG emissions; no data, however, exist for activity data and emissions factors. It is therefore imperative that efforts are made to collect activity data and to generate appropriate emission factors in this area.
3. Objective: To improve the quality of GHG inventories for non-residential biomass combustion in Asia.
4. Brief description: The project aims at generating activity data and emission factors for some significant sub-sectors of the non-residential biomass combustion category. After identifying these sub-sectors, methodologies for data collection will be developed to carry out experiments. Appropriate activities will be planned and executed.
5. Expected outputs/outcomes: • Activity data database for the sector; • New emission factors for a few important categories; • Input for emissions factors database for IPCC; • Improved the quality of national inventory.

1. Project title: *Development of activity data and emission factors for solid fuels used in selected small scale/informal sector industries in Asia*
2. Project rationale: • The informal sector is a very important part of the industrial sector in developing countries; • IPCC provides no emission factors for industries in the small and informal sectors; • Very scanty data exist for this sector.
3. Objective: To enhance the quality of GHG inventories which are required as part of national communications through the development of appropriate activity data and emission factors for solid fuels used in selected small scale/informal sector industries.
4. Brief description: To generate activity data and emission factors for key industries in 5 to 6 developing Asian countries.
5. Expected outputs/outcomes: • Improved activity data and emission factors for selected industries of the informal sector; • Provide inputs for the development of IPCC emission factors database.

1. Project title: *Development of activity data and emission factors for small auto producers (portable generator sets, small diesel engines for power) in Asia*
2. Project rationale: Continued power shortages have led to a proliferation of small power generators which run on petrol, diesel and kerosene. These devices might be contributing significantly to non-CO_2 GHG emissions. However, no scientific data exist on emission factors and no systematic method exists to compile activity data.
3. Objective: To improve the quality of GHG emissions for small auto producers (portable generator sets, small diesel engines for power) in Asia.
4. Brief description: The project aims to compile data on the prolific growth of small power generators to establish growth rate curve, both at the national and regional levels. Estimates of use-intensity, hours of operation, etc. will be made. Equipment/fuel specific emission factors will be obtained by experiments. Finally, attempts will be made to estimate total emissions from this sector.
5. Expected outputs/outcomes: • Experimental emission factors for small power generators (equipment/fuel combinations); • Growth curves for small power generators and estimated GHG contribution to total power and energy.

1. Project title: *Methodology for improvement and extension of national energy balances in Latin America and the Caribbean region*
2. Project rationale: The improvement in national energy balances will provide more detailed data in energy end-uses and hence a better estimate of GHG emissions. This will facilitate better design and implementation of GHG mitigation options that may qualify for funding under the clean development mechanism.
3. Objective: To include in the national energy balances the detailed energy end-uses and efficiencies by technology, equipment vintage and operating conditions, particularly in the transport and industry sectors.
4. Brief description: • Review of existing methodologies for elaborating national energy balances; • Undertake three case studies in different countries of the region; • Consolidate the results of the case studies in a new methodology for elaboration of an extended version of national energy balances.
5. Expected outputs/outcomes: A new national energy balance format, based upon the use of net calorific values and with more detailed information on energy end-uses in the transport, industry, residential and agriculture sectors.

1. Project title:
Development of activity data and emission factors for road transport sector in Transcaucasia

2. Project rationale

- Transcaucasian countries (Armenia, Azerbaijan and Georgia) are characterized by complicated relief. Roads pass high mountainous regions and in many cases are in poor conditions. The road transport fleets in the region mainly consist of vehicles that are 10-20 years old. Due to the poor economic situation, no new fleets are expected;
- Emissions from the road transport sector have been growing relatively fast. However, activity data and emission factors for this sector in the region are either unreliable or unavailable. The IPCC default values are, therefore, inapplicable;
- These countries are keen to participate in the clean development mechanism, hence the need to prepare good quality GHG inventories.

3. Objective:
To improve activity data and emission factors for the road transport sector in the region.

4. Brief description:
To review existing information and data on road transport in the region and develop appropriate activity data and emission factors based on survey and measurements. Establishment and regular updating of relevant databases.

5. Expected outputs/outcomes:

- Specific activity data and emission factors developed for the road transport sector in the region;
- Relevant databases;
- Aggregated GHG emissions from the road transport in region;
- Trends of road transport development (for projection of emission baseline).

1. Project title:
Application of good practice guidance in GHG inventory preparation in the energy sector of non-Annex I Parties

2. Project rationale:

- The IPCC good practice guidelines in inventory preparation will be completed in May 2000, and it is expected to be agreed upon by the SBSTA at its twelfth session;
- The objective of good practice is to ensure that estimates reported (although uncertain) would be the best available estimates of actual emissions;
- These good practice guidelines are essential for non-Annex I Parties to compile high quality GHG inventories according to IPCC 1996 revised guidelines.

3. Objective:
To disseminate and provide training in good practice guidelines with a view to improving the capacity of non-Annex I Parties to make their GHG inventories more reliable and of high quality.

4. Brief description:

- To organize eight regional/subregional training workshops for national experts to apply good practice guidelines;
- To translate and publish the good practice guidelines in other official languages of the United Nations.

5. Expected outputs/outcomes:

- Enhancement of capacity of non-Annex I Parties in preparing GHG inventories of better quality.

Annex III

List of other project concept notes which are not attached

Land-use change and forestry sector

Regional project: Assessment, development and dissemination of good inventory practices in the land-use change and forestry sector.

Global project: Global review and development of emission factors.

Regional project: Land-use and land cover change detection and monitoring project, using remote sensing: Phase I - Preliminary assessment.

Energy sector

Regional project: Improvement of activity data (AD) and emission factor (EF) in a number of energy consuming sectors in Africa: small scale uses, transborder fuel exchange, electricity autoproduction, agriculture, international bunkers, net calorific values of fuels and non-energy uses.

Regional project: Establishment of a sustainable framework for annual national and regional energy balances.

Regional project: To improve the quality of GHG inventories for very small scale and vintage (> 10 years) vehicles in Asia.

Regional project: Study on fugitive GHG emission from coal mines in Asia.

Regional project: Establishment of a data management system for regular updating of GHG inventory and mitigation strategy development.

Global project: Development of database on emission factors.

Global project: Regional centres as nodal places for coordinating measurements of emission factors and selected activity data.

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